1116-47-1576   **Raul E Curto*** (`raul-curto@uiowa.edu`). *Hyponormality of commuting pairs of Toeplitz operators with matrix-valued symbols.*

In joint work with In Sung Hwang and Woo Young Lee, we consider commuting pairs of Toeplitz operators on the Hardy space of the unit circle, whose symbols are matrix-valued. We obtain a complete characterization of (joint) hyponormality when the symbols are of bounded type. As in the scalar case (cf. R.E. Curto and W.Y. Lee, Joint hyponormality of Toeplitz pairs, Memoirs AMS 150, no. 712(2001)), we reduce joint hyponormality to the hyponormality of single Toeplitz operators. As a corollary, we obtain a simple description of (joint) hyponormality when the symbols are rational matrix-valued. Along the way we study the self-commutators of Toeplitz pairs with matrix-valued rational symbols, and derive the associated rank formulae. (Received September 20, 2015)